# AgLetter

# **FARMLAND VALUES AND CREDIT CONDITIONS**

## Summary

Farmland values in the Seventh Federal Reserve District rose faster in the second quarter of 2008—with both a 15 percent increase relative to the second quarter of 2007 and a 3 percent increase relative to the first quarter of 2008. The survey of 202 agricultural bankers covered the period from April 1, 2008, through June 30, 2008. Thirty-five percent more of the responding bankers expected farmland values to move up rather than down in the third quarter of 2008.

Agricultural credit conditions continued to improve, though not across the board. Renewals and extensions of loans dropped relative to the second quarter of 2007, and the loan repayment rate remained stellar for the District. The percentage of agricultural loans classified by respondents as having "major" or "severe" repayment problems was under 2 percent. Despite higher availability of funds in the second quarter, non-real-estate loan demand seemed to stagnate. The average loan-to-deposit ratio for District banks slid to 75.2 percent. Lastly, interest rates on farm operating loans and mortgages were higher, as of July 1, 2008.

## Farmland values

The year-over-year increase in District farmland values edged up to 15 percent for the second quarter of 2008  $\,$ 

## **CONFERENCE ANNOUNCEMENT**

## **Agricultural Markets and Food Price Inflation**

On October 2, 2008, the Federal Reserve Bank of Chicago will hold a conference on the economic impacts of volatile agricultural costs and food price inflation, including the potential implications of persistent changes in food prices on price stability at the macroeconomic level. For more details and the agenda, see www.chicagofed.org/news\_and\_conferences/conferences\_and\_events/2008\_agricultural\_conference.cfm.

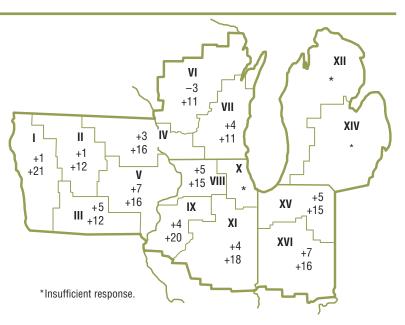
(see chart 1). Illinois and Indiana experienced the largest gains from a year ago. The quarterly increase in the value of "good" farmland was 3 percent for the District, larger than for the first quarter of 2008 (see table and map below). Indiana had the biggest quarterly increase of 6 percent, while Illinois and Iowa saw gains of 3 percent. Land values in Michigan and Wisconsin rose only 1 percent for the second quarter of 2008.

The upward momentum of corn and soybean prices pulled up farmland values, since the expected stream of earnings from crop production multiplied. In July, corn prices were 69 percent higher than a year ago, and soybean prices were 88 percent higher. These commodities

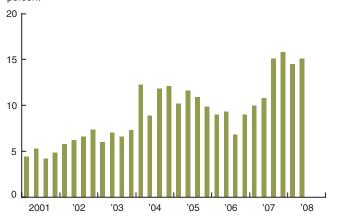
## Percent change in dollar value of "good" farmland

*Top:* April 1, 2008 to July 1, 2008 *Bottom:* July 1, 2007 to July 1, 2008

	April 1, 2008 to July 1, 2008	July 1, 2007 to July 1, 2008
Illinois	+3	+17
Indiana	+6	+16
lowa	+3	+15
Michigan	+1	+14
Wisconsin	+1	+13
Seventh District	+3	+15



# 1. Year-over-year changes in District farmland values, by quarter



provide a significant portion of District farm income, since 53 percent of U.S. corn output and 38 percent of soybeans come from the five-state region. The U.S. Department of Agriculture (USDA) estimated the 2008 harvest of corn for grain would decrease 6 percent from the 2007 level for the nation and 8 percent for the five-state region. A 15 percent increase in U.S. soybean production (but only an 8 percent increase for the region) reflected the fact that more acres were planted with soybeans, including acres replanted because of weather problems. These data indicate that late planting and flooding did not affect acreages and yields as much as initially thought, though an early frost could still reverse this conclusion.

Even with the record 2007 corn harvest and a forecast by the USDA that the 2008 harvest would be the second largest ever, high corn prices continued to be supported by tight stocks and by strong demand. In particular, corn for ethanol production would climb from 23 percent of the crop to 35 percent for the 2008–09 marketing year. Total usage of corn at 12.7 billion bushels would leave U.S. ending stocks at 1.13 billion bushels. Total soybean usage of 2.98 billion bushels would result in ending stocks of 135 million bushels. The soybean harvest would maintain about the same stocks-to-use ratio as in the 2007–08 crop year. So, both corn and soybean stocks would remain tighter than average. The USDA projected both corn and soybean prices for the 2008-09 marketing year to set nominal records. The latest estimated price intervals for the 2008–09 crop year were \$4.90 to \$5.90 per bushel for corn and \$11.50 to \$13.00 per bushel for soybeans.

For the third quarter of 2008 survey respondents expected farmland values to continue their increase. Since 37 percent of the respondents forecasted gains in land values between the start of July and the end of September and 2 percent forecasted declines, the recent increases in land values are unlikely to be over.

## **Credit conditions**

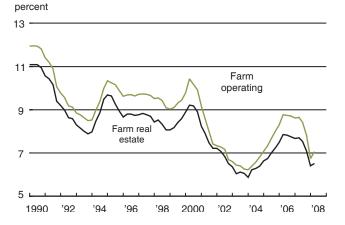
Rising agricultural prices boosted District credit conditions in the second quarter of 2008. Repayment rates for non-real-estate farm loans from April through June increased relative to the previous year. The index of loan repayment rates was 137, with 41 percent of the responding bankers noting higher rates of loan repayment and 4 percent lower rates. Moreover, less than 2 percent of the respondents' farm loan volume was classified as having "major" or "severe" repayment problems—lower than both six months ago and a year ago. With just 6 percent of respondents reporting an increase and 33 percent a decrease, there were fewer renewals and extensions of non-real-estate agricultural loans in the second quarter of 2008 compared with the second quarter of 2007.

Demand for non-real-estate agricultural loans increased once again, though just barely, when compared with that of the previous year. With 30 percent of the banks reporting increased demand compared with the second quarter of 2007, and 29 percent reporting decreased demand, the index of non-real-estate agricultural loan demand was 101—the lowest value in four years. In Indiana and Michigan, about 20 percent more bankers reported higher loan demand than lower loan demand, whereas the rest of the District experienced slightly negative loan demand relative to a year ago.

The index of funds availability was 124, as 32 percent of the banks had more funds available and 8 percent had fewer. With relatively weaker loan demand and strong funds availability, the average loan-to-deposit ratio in the District dipped to 75.2 percent—the lowest since the start of 2005 and 4.6 percent below the ratio desired by the banks. Compared with the second quarter of 2007, the amount of collateral required for loans was higher at 15 percent of the reporting banks and lower at 1 percent.

Agricultural interest rates climbed after a year of declines (see chart 2). As of July 1, the District average for

## 2. Quarterly District farm loan interest rates



## **Credit conditions at Seventh District agricultural banks**

Loan demand	Funds availability	Loan repayment rates	Average loan-to- deposit ratio	Operating loans <sup>a</sup>	Feeder cattle <sup>a</sup>	Real estate <sup>a</sup>	
(index) <sup>b</sup>	(index) <sup>b</sup>	(index) <sup>b</sup>	(percent)	(percent)	(percent)	(percent)	
131	102	87	76.7	8.30	8.27	7.48	
115	101	85	78.0	8.76	8.66	7.85	
124	95	87	79.1	8.73	8.70	7.82	
109	116	130	76.6	8.71	8.70	7.74	
128	113	131	78.4	8.61	8.60	7.67	
121		117	77.8	8.65	8.63	7.70	
118		122	78.1	8.42	8.40	7.53	
110	126	149	77.2	7.82	7.89	7.09	
110	129	147	75.9	6.74	6.86	6.41	
101	124	137	75.2	7.06	6.77	6.51	
	demand (index) <sup>b</sup> 131 115 124 109  128 121 118 110	demand         availability           (index) <sup>b</sup> (index) <sup>b</sup> 131         102           115         101           124         95           109         116           128         113           121         115           118         118           110         126	demand         availability         repayment rates           (index)b         (index)b         (index)b           131         102         87           115         101         85           124         95         87           109         116         130           128         113         131           121         115         117           118         118         122           110         126         149	demand         availability         repayment rates         deposit ratio           (index)b         (index)b         (index)b         (percent)           131         102         87         76.7           115         101         85         78.0           124         95         87         79.1           109         116         130         76.6           128         113         131         78.4           121         115         117         77.8           118         118         122         78.1           110         126         149         77.2           110         129         147         75.9	demand         availability         repayment rates         deposit ratio         loans <sup>a</sup> (index) <sup>b</sup> (index) <sup>b</sup> (index) <sup>b</sup> (percent)           131         102         87         76.7         8.30           115         101         85         78.0         8.76           124         95         87         79.1         8.73           109         116         130         76.6         8.71           128         113         131         78.4         8.61           121         115         117         77.8         8.65           118         118         122         78.1         8.42           110         126         149         77.2         7.82           110         129         147         75.9         6.74	demand         availability         repayment rates         deposit ratio         loans <sup>a</sup> cattle <sup>a</sup> (index) <sup>b</sup> (index) <sup>b</sup> (index) <sup>b</sup> (percent)         (percent)           131         102         87         76.7         8.30         8.27           115         101         85         78.0         8.76         8.66           124         95         87         79.1         8.73         8.70           109         116         130         76.6         8.71         8.70           128         113         131         78.4         8.61         8.60           121         115         117         77.8         8.65         8.63           118         118         122         78.1         8.42         8.40           110         126         149         77.2         7.82         7.89	

Note: Historical data on Seventh District agricultural credit conditions is available for download from the *AgLetter* homepage, www.chicagofed.org/economic\_research\_and\_data/ag\_letter.cfm.

\*At end of period.

interest rates on new operating loans was 7.06 percent, 170 basis points below the most recent peak two years ago. Interest rates for farm real estate loans averaged 6.51 percent, 134 basis points lower than two years ago.

Just like last year, in the first half of 2008, the Farm Credit System (FCS) expanded its share of the agricultural loan market by generating a larger amount of loans compared with other lenders in the District. Thirty-seven percent and 53 percent more banks reported that the amounts of FCS operating loans and mortgages, respectively, had increased rather than decreased in their area. Merchants, dealers, and other input suppliers generated more loans than normal as well, according to the respondents; 28 percent more reported higher rather than lower loan amounts. Banks also increased their level of loan activity, noting that 15 percent of operating loans and 7 percent of mortgages had higher versus lower than normal amounts. Life insurance companies maintained about the same amount of farm loans during the first half of 2008.

#### Looking forward

Expected farm loan volumes for the third quarter of 2008 were mixed, according to the bankers. One-quarter of the respondents anticipated farm non-real-estate loan volume to be higher from July through September compared with the same period in 2007, while one-quarter anticipated lower volume. With several mentions of herd reductions due to elevated feed costs, both feeder cattle and dairy loan volumes were expected to decline rather than rise by more respondents. Operating loans (12 percent more responding higher than lower), farm machinery loans (34 percent), and grain storage construction loans (24 percent) were forecasted to have higher volumes in the third

quarter of 2008. Bankers predicted an increase in real estate loan volume (20 percent higher versus 12 percent lower) for the third quarter of 2008.

Many of the respondents had concerns about potential problems for crop farmers in 2009. Given a more challenging risk-management environment and higher costs for loans, cash rents, fertilizers, seeds, and fuel, farmers will likely face a squeeze in their cash flows next spring. With some cooperatives and other buyers unwilling to forward contract sales for 2009, bankers reported that some farmers have chosen to deal directly with crop futures markets as part of their risk-management strategies. Even though 2008 looks to be a record year for the net income of crop farmers, concerns about the volatility of both costs and agricultural prices remained.

David B. Oppedahl, Business economist

Interest rates on farm loans

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Bankers responded to each item by indicating whether conditions during the current quarter were higher, lower, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded "lower" from the percent that responded "higher" and adding 100.

# **SELECTED AGRICULTURAL ECONOMIC INDICATORS**

SELECTED AGRICULTURAL ECONOMIC INDICATO	Latest period	Value	Percent change from			
			Prior period	Year ago	Two years ago	
Prices received by farmers (index, 1990–92=100)	July	161	1.9	16	38	
Crops (index, 1990–92=100)	July	186	1.6	32	51	
Corn (\$ per bu.)	July	5.61	2.4	69	162	
Hay (\$ per ton)	July	164.00	1.9	25	53	
Soybeans (\$ per bu.)	July	14.20	7.6	88	153	
Wheat (\$ per bu.)	July	7.29	-4.3	41	92	
Livestock and products (index, 1990–92=100)	July	138	0.7	1	24	
Barrow and gilts (\$ per cwt.)	July	54.10	-0.7	2	6	
Steers and heifers (\$ per cwt.)	July	100.0	3.7	8	11	
Milk (\$ per cwt.)	July	19.4	0.5	-10	66	
Eggs (¢ per doz.)	July	84.1	-20.7	-11	93	
Consumer prices (index, 1982–84=100)	July	220	0.5	6	8	
Food	July	215	1.0	6	10	
Production or stocks						
Corn stocks <i>(mil. bu.)</i>	June 1	4,028	N.A.	14	-8	
Soybean stocks (mil. bu.)	June 1	676	N.A.	-38	-32	
Wheat stocks (mil. bu.)	June 1	306	N.A.	-33	-46	
Beef production (bil. lb.)	July	2.37	4.9	5	7	
Pork production (bil. lb.)	July	1.85	5.2	12	19	
Milk production (bil. lb.)*	July	14.8	0.5	2	6	
Agricultural exports (mil. dol.)	June	9,592	0.9	44	70	
Corn (mil. bu.)	June	184	2.3	8	-7	
Soybeans (mil. bu.)	June	63	14.4	28	59	
Wheat (mil. bu.)	May	82	-3.3	-9	9	
Farm machinery (units)						
Tractors, over 40 HP	July	8,570	-11.9	0	3	
40 to 100 HP	July	6,518	-12.3	-9	-10	
100 HP or more	July	2,052	-10.5	48	79	
Combines	July	857	8.6	14	30	

N.A. Not applicable. \*23 selected states.

Sources: Author's calculations based on data from the U.S. Department of Agriculture, U.S. Bureau of Labor Statistics, and the Association of Equipment Manufacturers.